

QUESTIONS SUBMITTED BY MR. TURNER

Mr. TURNER. At the House Armed Services Committee's October 13 hearing, Secretary of Defense Panetta said, "With regards to reducing our nuclear arena, I think that is an area where I don't think we ought to do that unilaterally—we ought to do that on the basis of negotiations with the Russians and others to make sure we are all walking the same path." To ensure we are not reducing unilaterally, will we retain nuclear forces that are at—or very near—the limits on strategic forces imposed by the New START Treaty? Otherwise, wouldn't it by definition be "unilateral" reductions?

a. Would you support reductions if they were a part of a non-binding agreement with Russia?

b. At what force levels do we need to start bringing the "others" Secretary Panetta mentions, particularly China, into the picture?

Dr. MILLER. The Administration has not made a final decision on the specific mix of forces to be deployed under the New START Treaty. DOD continues to plan on 240 SLBM launchers, up to 420 ICBM launchers, and up to 60 nuclear-capable heavy bombers. It is important to note that the U.S. retains the flexibility to modify the mix of delivery systems under the Treaty.

a. As stated in the Nuclear Posture Review (NPR), because of our improved relations, the need for strict numerical parity between the United States and Russia is no longer as compelling as it was during the Cold War. But large disparities in nuclear capabilities could raise concerns on both sides and among U.S. Allies and partners, and may not be conducive to maintaining a stable, long-term, strategic relationship, especially as nuclear forces are significantly reduced. Therefore, we will place importance on Russia joining us as we move to lower levels.

b. Maintaining strategic stability with both Russia and China will remain a critical challenge in the years ahead. China is estimated to have only a few hundred nuclear weapons and to be modernizing its nuclear arsenal; a Chinese "sprint to parity" has not materialized. That said, the overall lack of transparency surrounding China's nuclear programs and capabilities raises questions about China's future strategic intentions. We continue to pursue high-level, bilateral dialogues with both Russia and China that seek to promote more stable, resilient, and transparent strategic relationships. It is impossible at this time to pinpoint an exact force level at which the United States and Russia would want to bring other nations into a binding agreement. However, given that the United States and Russia will still account for 90 percent of the world's nuclear weapons after New START is implemented, there is a clear opportunity for future bilateral reductions—including of tactical nuclear weapons, which the Russians have in much larger numbers.

Mr. TURNER. Dr. Miller, you noted that the NPR stated that "strict numerical parity between the United States and Russia is no longer as compelling as it was during the Cold War," but that "we will place importance on Russia joining us as we move to lower levels." In my mind, "placing importance on" is not the same as "we won't do this." Will the administration make reductions without reciprocal and proportionate reductions from Russia?

Dr. MILLER. The Administration is conducting a Nuclear Posture Review (NPR) implementation study to determine the nuclear force size and structure needed to support U.S. national security requirements and meet international obligations in a dynamic security environment. The ongoing study was directed by the President as part of the 2010 NPR. The analysis from this study will provide options for the President's guidance to the Departments of Defense and Energy on nuclear planning with respect to the force structure, force posture, and stockpile requirements needed to protect the United States and its Allies and partners, and to inform plans for the employment of nuclear weapons in the event that deterrence fails. As stated in the NPR, the United States intends to pursue further reductions in nuclear weapons with Russia. When complete, the analysis of deterrence requirements and force postures will inform the development of any future arms control objectives.

Mr. TURNER. How many military and civilian personnel in the executive branch have full or partial access to nuclear employment and targeting guidance issued by the President, the Secretary of Defense, the Chairman of the Joint Chiefs of Staff,

and the Commander of U.S. Strategic Command? Please break down this information by the numbers of personnel with access to each level of guidance. How many personnel in the legislative branch have full or partial access to each level of guidance?

Dr. MILLER. A very small group of personnel in the executive branch have access to the nuclear employment guidance issued by the President, the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, and the Commander, U.S. Strategic Command. Even within the Department of Defense (DOD), access to this sensitive material is tightly controlled. Within the Department of Defense, fewer than twenty copies of the President's guidance are distributed in the Office of the Secretary of Defense, the Joint Staff, and U.S. Strategic Command. Fewer than 200 copies of the most recent amplifying guidance issued by the Secretary of Defense were produced, and distribution was limited primarily to Office of the Secretary of Defense, the Joint Staff, U.S. Strategic Command, and other Combatant Commanders. The Chairman's guidance is distributed more widely within DOD (fewer than 200 copies), as the document assigns responsibilities to several defense agencies and the intelligence community. Commander, U.S. Strategic Command must issue guidance to his planners and forces in the field, so distribution is somewhat wider because of that need.

There is a long history of debate about providing the legislative branch access to this material. As a result, instances of providing access to a member of Congress and senior staff personnel have been quite limited and under restrictive terms.

This Administration is committed to working with Congress and supporting effective congressional oversight on nuclear policy and modernization issues. To this end, the Secretary of Defense has invited the Chairmen and Ranking Members of the House and Senate Armed Services Committees and the Strategic Forces Subcommittees, and the relevant staff directors, to participate in a set of classified briefings that the Office of the Secretary of Defense would provide, in conjunction with the Joint Staff and U.S. Strategic Command. The provision of such information would be subject to strict safeguards given its extremely sensitive nature.

Mr. TURNER. The House Appropriations Committee reported a Defense Appropriations bill that contains a 1% reduction from the President's budget request for DOD. The House Appropriations Committee reported an Energy and Water appropriations bill that contains a 10% reduction for NNSA and all of its defense activities. This came after strong and vocal support from Secretary Gates and senior military leaders for NNSA's full budget request. How do these discrepancies affect planning, budgeting, and coordination between NNSA and DOD on the overall nuclear security enterprise? Should all aspects of the nuclear security enterprise be consolidated into a single budgetary and appropriations authority?

Dr. MILLER. The modernization program was closely coordinated between the Department of Energy and the Department of Defense to ensure that modernization efforts are funded, but also to manage costs wisely. If Congress makes reductions without context and without thoroughly examining the long-term effects on the national interest, such actions could undermine our plans to ensure a safe, secure, and effective nuclear deterrent.

It is essential to look across the complete nuclear security enterprise to review budgetary impacts fully, particularly in light of our current fiscal situation and the new constraints imposed by the Budget Control Act of 2011; however, this does not necessarily require a single budgetary and appropriations authority. As you know, the Nuclear Weapons Council (NWC), established in Title 10, Section 179, of the U. S. Code, has responsibility for coordinating programming and budget matters pertaining to nuclear weapons programs between the Department of Defense and the Department of Energy. The NWC has been active in this role, and the Departments of Defense and Energy will continue to consider any steps that could further improve effective planning and oversight.

Fulfilling the President's commitment to modernize the nuclear enterprise will require full and sustained congressional support. As we review our defense budget for the most cost-effective means to secure our Nation, I look forward to working with Congress to ensure funding for the critical activities within the Department of Defense and Department of Energy that are necessary to sustain the most effective nuclear deterrent.

Mr. TURNER. You said the 1251 Report shows that the total cost of sustaining, operating, and modernizing our nuclear forces, nuclear weapons, and their supporting infrastructure over the next ten years—for both DOD and NNSA—is on the order of \$214 billion. What percentage of the defense budget is this? What percentage of the full federal budget is this? How does this compare to historical trends, including the Cold War? Please be as specific as possible.

Dr. MILLER. The \$214 billion is about 3 percent of the 10-year defense base budget of \$6.3 trillion (including the Department of Defense (DOD) and the National Nuclear Security Administration) and is about 2 percent of the Federal budget of \$12.2 trillion (excluding Overseas Contingency Operations).

The following are some historical trends based on the DOD budget:

- Funding for Strategic Forces (\$0.6 trillion) as a percent of the DOD budget (\$12.7 trillion) from FY 1962 to FY 2011 was about 4 percent.
- Funding for Strategic Forces (\$0.4 trillion) as a percent of the DOD budget (\$4.4 trillion) during the Cold War (based upon data from FY 1962 to FY 1991) was about 8 percent.
- Funding for Strategic Forces (\$.2 trillion) as a percent of the DOD budget (\$8.3 trillion) after the Cold War (from FY 1992 to FY 2011) was about 2 percent.

Note: The source for the historical data was from Table 6.4, Department of Defense TOA by Program, in DOD's "National Defense Budget Estimates for FY 2012" book (commonly referred to as the "Green Book." This historical data includes all supplements and Overseas Contingency Operations/Global War on Terrorism funding.

Mr. TURNER. We have heard that within the Deterrence and Defense Posture Review (DDPR) process, some NATO allies might be encouraging several changes to NATO's nuclear posture, possibly including: (1) consolidation of U.S. nuclear forces in Europe to one or more centralized bases, (2) decreasing the number of dual-capable aircraft our allies are required to maintain, (3) relaxing or eliminating requirements for pilots from allied nations to be trained and exercise in the nuclear mission, and (4) potential removal of U.S. nuclear weapons from Europe.

- a. Are any of these actions being considered by the DDPR? Which ones?
- b. Would NATO and the U.S. consider taking any of these steps unilaterally, without reciprocal and proportionate action on the part of Russia?
- i. What actions would we consider taking unilaterally, and what actions would we only undertake bilaterally with Russia?
- ii. What reciprocal actions would the U.S. look for from Russia in exchange for any of these four actions?

Dr. MILLER. The DDPR process is still in the deliberative stages. However, in keeping with the Strategic Concept, any future reductions will be made on the basis of reciprocity with Russia, not unilaterally. We have not determined what reciprocal actions from Russia would be sufficient for future changes.

Mr. TURNER. Some subset of F-35 joint strike fighters are intended to be nuclear-capable, replacing the nuclear-capable F-16s that will be retired due to age. Can you affirm that there will be nuclear-capable F-35s? This decision has been made and is being implemented?

- a. How many F-35s will be nuclear-capable?
- b. Based on the current F-35 program plan, when will the first nuclear-capable F-35s be deployed?
- c. When will the first nuclear-capable F-35s be deployed to Europe?

Dr. MILLER. Yes, the 2010 Nuclear Posture Review confirmed the need to retain a dual-capable fighter to ensure that the United States retains the ability to forward deploy non-strategic nuclear weapons in support of Alliance commitments. The Air Force plans to replace current DCA-capable aircraft with the F-35 Joint Strike Fighter and intends to program, develop, and integrate nuclear capability as part of the Joint Strike Fighter's Block 4 upgrade planned to be released to the field in the early 2020s.

- a. The Air Force plans to purchase 1,763 F-35As. The Air Force remains committed to deliver the DCA capability with the Block 4 upgraded F-35As in the early 2020s.
- b. The Air Force will be prepared to deploy nuclear-capable F-35As after the Block 4 upgrade in the early 2020s.
- c. The first nuclear-capable U.S. Air Force F-35As will be available for Europe in the early 2020s.

Mr. TURNER. How does the deployment of the B61-12 warhead align with deployment of nuclear-capable F-35s? Is deployment of the two systems linked? Can one deploy without the other, while still retaining our nuclear capability in Europe?

Dr. MILLER. The B61-12 will sustain the U.S. extended deterrence commitment to our Allies through life extension of the aging B61 family of bombs. As part of this life-extension effort, compatibility with the F-35 will be preserved; however, the B61 and F-35 programs are not dependent on one another. Until the F-35 becomes nuclear-capable, non-strategic deployment of the B61-12 will, if required, occur through the use of existing Dual-Capable Aircraft.

Mr. TURNER. Are our NATO allies still planning to purchase dual-capable F-35s to replace their aging dual-capable aircraft? How many do they plan to purchase

and when? Please describe the plans for NATO countries to replace or modernize their nuclear-capable aircraft, including numbers of aircraft and timelines for purchase. How are these plans being reflected in the DDPR?

Dr. MILLER. Although the specific dates and quantities are classified, some Allies are still planning to purchase F-35 aircraft. The DDPR process is still in the deliberative stage.

Mr. TURNER. When NNSA conducts a life extension program on a particular weapon type, will NNSA extend the life of all warheads of that type, including those in the non-deployed "hedge" part of the stockpile? Or will it only extend those weapons in the active, deployed part of the stockpile?

Dr. MILLER. Each nuclear weapon life extension is unique to its type and the hedge required to support operational requirements. Total quantities for each life extension are determined by accounting for operational needs, reliability and surveillance testing, spares, and hedge needs. Hedge quantities are affected by geopolitical and technical requirements to support each leg of the triad. The Administration is reviewing hedging requirements and their implication for stockpile size and status as part of the Nuclear Posture Review implementation study.

Mr. TURNER. Would you please elaborate on your statement that "To date no decisions have been made with respect to future force sizing or the modernization plans for nuclear delivery systems; such decisions will be informed by the Administration's ongoing review of deterrence requirements"? Do the commitments made for modernization in the 1251 Report still hold? Does the President's commitment to the Senate during New START consideration still hold? In a message to the Senate on New START, the President said: "I intend to (a) modernize or replace the triad of strategic nuclear delivery systems: a heavy bomber and air-launched cruise missile, an ICBM, and a nuclear-powered ballistic missile submarine (SSBN) and SLBM."

Dr. MILLER. To date, no final decisions have been made with respect to the specific future force sizing or the modernization plans for nuclear delivery systems—i.e., the exact mix of delivery systems and warheads under the New START Treaty. Such decisions will be informed by the Administration's ongoing review of deterrence requirements. I can assure you, however, that these decisions will be consistent with the goals of the NPR, including to maintain strategic stability, provide assurance to our Allies and partners regarding the credibility of the U.S. nuclear umbrella and other security commitments, and to maintain a safe, secure, and effective nuclear deterrent.

The Administration is committed to making the investments necessary to recapitalize the nuclear enterprise and ensure we have the highly skilled personnel needed to maintain our nuclear capabilities. These are large investments that must be made over an extended period, but are essential to U.S. national security.

Mr. TURNER. The 2010 Nuclear Posture Review (NPR) says that "the presence of U.S. nuclear weapons—combined with NATO's unique nuclear sharing arrangements under which non-nuclear members participate in nuclear planning and possess specially configured aircraft capable of delivering nuclear weapons—contribute to Alliance cohesion and provide reassurance to allies and partners who feel exposed to regional threats."

a. Please explain how the presence of nuclear weapons in Europe contributes to NATO cohesion, reassurance, and stability.

b. In particular, which NATO allies value these nuclear weapons and "feel exposed to regional threats"?

c. Will unanimity among NATO members be required before any major changes are made to our nuclear posture in Europe? What sorts of changes to our nuclear posture in Europe might we undertake without unanimity of NATO members?

Dr. MILLER. The Strategic Concept reinforced that the Alliance will maintain an "appropriate mix" of nuclear and conventional forces, and that the Alliance would "remain a nuclear Alliance as long as nuclear weapons exist." As such, nuclear weapons contribute to overall cohesion and stability of the Alliance. The Strategic Concept also lays out the threats to which all members are exposed, including conventional threats, proliferation threats, terrorism, and cyber attacks. No major changes to nuclear posture would be expected without consensus from Alliance members.

Mr. TURNER. Dr. Miller, you recently told a reporter that DOD might be willing to contribute more funding to NNSA's nuclear modernization efforts, but would not be willing to transfer any more budget authority if the Energy and Water appropriators do not use it for the intended modernization purpose. Were you referring to some of the \$8.3 billion in budget authority DOD has already pledged for NNSA, or were you referring to additional funds beyond this \$8.3 billion?

Dr. MILLER. The approximately \$8.3B pledged for NNSA consisted of two separate transfers—the first was \$5.7B during Fiscal Year (FY)11–FY15 and the second was

\$2.5B during the FY12–16 period. This second transfer was intended to be distributed annually. It is the annual distribution of this second transfer that I believe should be reconsidered if funding is not appropriated as it was intended.

Mr. TURNER. Dr. Miller, you recently said that you haven't seen anything to suggest that \$7.6 billion for NNSA Weapons Activities is not the correct figure for FY12. Would you please elaborate?

Dr. MILLER. The Fiscal Year (FY)12 Presidential Budget Request for NNSA Weapons Activities was \$7,629,716,000, which is the amount required to meet DOD nuclear weapons requirements. This figure was arrived at after careful consideration of the need to implement the policies of the Nuclear Posture Review and the requirements of the New START Treaty. This funding request is in alignment with the ten-year funding profile in the report pursuant to Section 1251 of the National Defense Authorization Act for Fiscal Year 2010; this profile was provided to Congress in February 2011. It also includes a transfer of funds from the DOD to the NNSA to ensure weapon life extension programs and nuclear facility modernization efforts are funded appropriately.

Mr. TURNER. The 2010 NPR states that nuclear force reductions are possible because of overwhelming conventional military superiority. Since the NPR was written, \$330 billion in weapons systems have been cancelled and \$489 billion has been taken out of the defense budget. And now we have the specter of sequester looming ahead with the promise of an additional half trillion in cuts. Is this premise in the 2010 NPR still valid? At what point is it not? Where is the break-point in terms of our conventional military superiority as we see both China's large buildup in conventional military capability and asymmetric capabilities and China and Russia's major nuclear modernization programs?

Dr. MILLER. Under the funding levels required by the Budget Control Act, the United States will continue to possess overwhelming conventional capability against any conceivable adversary for the foreseeable future. If sequestration occurs, the scale and arbitrary nature of the required cuts to defense spending would inflict severe damage on the U.S. military. In this case, the United States would need to reconsider all elements of its defense strategy.

Mr. TURNER. After implementation of the New START Treaty and the NPR, what percentage of our strategic forces will be deployed on submarines?

a. Has the U.S. ever deployed so much of its deterrent on a single platform before? In other words, on one leg of the triad and on one type of submarine, ICBM, or bomber? What risks does the U.S. accept by doing so?

Dr. MILLER. Final decisions on specific force mix under New START have not yet been made, but more than half of our operational strategic warheads will be deployed on submarines.

The United States since the end of the Cold War, has deployed a large portion of our forces on SSBNs. The percentage of warheads deployed aboard SSBNs today is very similar to what we would expect after full implementation of the New START Treaty.

There are both operational and technical risks associated with strategic submarines. The operational risk is that these submarines could become vulnerable—a scenario that appears highly unlikely for the indefinite future. The technical risk is that a problem with the type of warheads carried on the submarines, or with our submarine-launched ballistic missiles, or the submarines themselves, could result in that portion of the force becoming unavailable. A massive technical failure is also highly unlikely. However, because of the importance of the nuclear deterrence mission we mitigate these risks by maintaining the capability to upload other legs of the Triad in response. To be well-hedged against a technical surprise remains a key priority, and is one of the metrics we use when evaluating force structures.

Mr. TURNER. The NPR concluded that "the current alert posture of U.S. strategic forces ... should be maintained for the present." Please explain why the NPR reached this decision. What are the benefits of our current alert posture? Do you anticipate changes in this decision?

Dr. MILLER. The Nuclear Posture Review (NPR) considered the possibility of reducing alert response requirements for ICBMs and at-sea response requirements of SSBNs, and concluded that such steps could reduce crisis stability by giving an adversary the incentive to attack before "re-alerting" was complete. At the same time, the NPR concluded that returning heavy bombers to full-time nuclear alert was not necessary, assuming the other two Triad legs retain an adequate alert posture.

The current alert posture supports strategic stability through an assured second-strike capability. It ensures that, in the calculations of any potential opponent, the perceived gains of attacking the United States or its Allies and partners would be far outweighed by the unacceptable costs of the response.

At this time, I do not anticipate any major changes in the alert posture for U.S. strategic forces.

Mr. TURNER. Germany and Norway have put forward ideas in the DDPR process to increase transparency in NATO's nuclear mission and NATO's nuclear forces. What transparency measures are being considered?

a. What NATO transparency measures are the U.S. comfortable with NATO doing unilaterally (i.e., without reciprocal and proportionate action by Russia)?

b. What NATO transparency measures would we only consider doing bilaterally based on agreements with Russia? Would you anticipate such bilateral agreements being based on non-binding agreements or through some sort of binding treaty or agreement?

c. How does the administration define "transparency"? How does it define "verification"? How are the two concepts related?

Dr. MILLER. The Deterrence and Defense Posture Review (DDPR) process is still in the deliberative stages. We have not determined what constitutes "transparency measures" and which ones will be considered.

Transparency and verification are closely related concepts. The New START Treaty, for instance, provides significant transparency regarding the strategic nuclear relationship between the United States and Russia through its extensive verification regime. The Treaty's verification measures include extensive notifications, prohibitions on interference with National Technical Means (NTM), unique identifiers, inspections, and exhibitions. These measures allow each side to gain important insights into the other side's strategic forces. They also reduce uncertainty about the future direction of Russian strategic forces and assist in improved planning for our future defense needs. On the whole, this shared knowledge is valuable for maintaining strategic stability between the two major nuclear powers.

Mr. TURNER. How does the B61 Life Extension Program (LEP), which would consolidate several different versions of the B61 into a single B61-12 version, link to our extended deterrent in Europe?

a. What are the implications, both to our extended deterrent and more broadly, of delay in the B61 LEP?

b. Why is it important to increase surety in B61 warheads during the LEP?

Dr. MILLER. The intent of the B61 LEP is to consolidate four current versions of the B61 family of bombs into one single version that will continue to sustain both our strategic and extended deterrence missions. NNSA, in coordination with the Department of Defense (DOD), identified the Initial Operating Capability (IOC) and Full Operating Capability (FOC) to ensure that a seamless transition between the B61-12 and the earlier versions that it is replacing is achieved without any loss in operational capability. The NNSA and DOD will continue to address any delay in meeting these dates that could potentially jeopardize those missions and the extended deterrence commitment to our Allies and friends.

As part of any life extension program, NNSA considers options for enhancing the safety, security, and use control features of a weapon system as part of the Phases 6.1/2/2A process. Policy directives require an assessment of the warhead to meet safety and security objectives for the future. This process ensures that viable weapon surety features are identified and evaluated against all other design requirements and balanced against cost and schedule risks to assure our commitment to a safe, secure, and effective nuclear deterrent.

Mr. TURNER. When will a decision be made regarding how specifically our nuclear forces will be structured to comply with the New START Treaty? When will de-MIRVing of our ICBM forces begin to occur?

Dr. MILLER. To date, no final decisions have been made with respect to force structure under the new START Treaty; such decisions will be informed by the Obama Administration's ongoing review of deterrence requirements. I can assure you that these decisions will be consistent with the goals of the Nuclear Posture Review (NPR), including to maintain strategic stability, provide assurance to our Allies and partners regarding the credibility of the U.S. nuclear umbrella and other security commitments, and to maintain a safe, secure, and effective nuclear deterrent.

Partial "de-MIRVing" (MIRV, Multiple Independent Reentry Vehicle) of our ICBM forces began in the 1990s as part of our reductions under the START Treaty. The Air Force has also begun the complete de-MIRVing of the rest of the ICBM force, as directed in the NPR, in conjunction with previous commitments and Air Force-established maintenance plans. This minimizes disruption to our operational forces and is the most cost-effective method for carrying out the NPR guidance to de-MIRV the ICBM force.

Mr. TURNER. Dr. Miller, in your remarks, you said "The U.S. nuclear arsenal included 5,113 weapons as of September 30, 2009, at the time of our last unclassified release of stockpile totals." How many of those weapons were in the various cat-

egories of active, inactive, deployed, non-deployed, etc.? Is there any intention to make such detailed numbers public?

Dr. MILLER. The specific numbers associated with the deployed/non-deployed, active/inactive stockpile remain classified and, as such, are not to be made public. However, the United States declared an aggregate 1,790 warheads on deployed ICBMs, deployed SLBMs, and counted for deployed heavy bombers to the Russian Federation as part of the New START Treaty on September 1, 2011. There is no current plan to make public the specific numbers of deployed/non-deployed, active/inactive stockpile weapons.

Mr. TURNER. How many nuclear warheads does Russia make each year? What is our estimate for how many it can make? How does this compare to actual U.S. production and our potential production capacity?

Dr. MILLER. [The information referred to is classified and retained in the committee files.]

Mr. TURNER. Dr. Miller, when you said "unclassified estimates suggest that Russia has 4,000 to 6,500 total nuclear weapons, of which 2,000 to 4,000 are non-strategic tactical nuclear weapons," are those numbers active warheads or all Russia warheads (including those in storage or non-deployed status)?

Dr. MILLER. [The information referred to is classified and retained in the committee files.]

Mr. TURNER. Are you concerned about reports about China potentially increasing the MIRVing of its land- and sea-based ballistic missiles? How might this trend affect the nuclear balance and our nuclear policies 10 or 20 years from now? Are you concerned about reports of Russia developing and deploying new heavy, highly-MIRV'd, silo-based ICBMs? How would deployment of this system affect strategic stability and U.S. nuclear policies and strategies? Did the U.S. seek to ban such systems during New START negotiations?

Dr. MILLER. We are concerned about the pace and scope of the modernization of China's nuclear capabilities, both quantitatively and qualitatively. We are also concerned about the lack of transparency regarding the strategy and doctrine guiding this effort. Moreover, the overall lack of transparency surrounding China's nuclear programs and capabilities raises questions about China's future strategic intentions and makes it difficult to assess the future nuclear balance.

A Russian deployment of a new heavy, highly MIRVed, silo-based ICBM would reduce our strategic stability. The United States is taking steps to enhance strategic stability, including de-MIRVing ICBMs and sustaining a robust at sea presence of strategic submarines. These U.S. steps reduce first-strike incentives for both sides, thereby enhancing stability.

These questions and potential concerns illustrate why we continue to pursue high-level, bilateral dialogues with China and Russia that seek to promote a more stable, resilient, and transparent strategic relationships.

Mr. TURNER. The NPR mentions "strategic stability" more than a dozen times, but never defined it. How does the administration define "strategic stability"? How does it relate to force structure, numbers, and modernization? How do nuclear modernization programs in Russia and China affect strategic stability? How is strategic stability affected in the long-term if other countries continue their nuclear modernization efforts but our own modernization effort stalls or is greatly reduced in scope?

Dr. MILLER. Strategic stability exists when no side has incentives or believes the other side has incentives to attempt to conduct a disarming first-strike, whether in a day-to-day situation ("bolt-from-the-blue" scenario) or in a severe crisis ("pre-emption in crisis" scenario). Survivable nuclear forces and command and control are critical to strategic stability, and other factors including the de-MIRVing of silo-based ICBMs contribute to stability. Modernization that sustains or improves the survivability of nuclear forces and command and control can be stabilizing. Increased transparency and discussions on strategic doctrine, which the United States would like to expand with Russia and initiate with China, can also improve stability by reducing the prospects for miscommunication or misperception.

Mr. TURNER. General Kehler, you cautioned against cutting the budget or size of our nuclear forces too deeply, resulting in what you called a "hollow force." For each of the three legs of the triad, what are the breakpoints or red-lines in the size of the force or budget that would result in a "hollow force" for that leg?

- a. What analysis has been done to examine these questions?
- b. Would cutting one wing of ICBMs—leaving us with two wings—potentially result in a hollow force in that leg of the triad?

General KEHLER. A hollow force is a force giving the appearance of readiness when, in fact, the capability is not there. The force may be hollow if it is too small for the job, is inadequately supported, or lacks an adequate industrial base. There-

fore, any discussion and assessment on "hollow force" or breakpoints must be preceded by a thorough analysis of the strategy, its objectives, force composition, and the level of budgetary support.

A. Resources and force structure identified in the President's Budget and the updated 1251 Report are adequate to support today's strategic deterrent strategy and policy goals as we move forward to implement New START.

B. Eliminating a wing of ICBMs would not necessarily create a hollow force, provided the remaining wings can meet national strategic deterrent requirements, and are properly trained, equipped, maintained, sustained, and led.

Mr. TURNER. At the House Armed Services Committee's October 13 hearing, Secretary of Defense Panetta said, "With regards to reducing our nuclear arena, I think that is an area where I don't think we ought to do that unilaterally—we ought to do that on the basis of negotiations with the Russians and others to make sure we are all walking the same path." To ensure we are not reducing unilaterally, will we retain nuclear forces that are at—or very near—the limits on strategic forces imposed by the New START Treaty? Otherwise, wouldn't it by definition be "unilateral" reductions?

a. Would you support reductions if they were a part of a non-binding agreement with Russia?

b. At what force levels do we need to start bringing the "others" Secretary Panetta mentions, particularly China, into the picture?

General KEHLER. As specified in the 1251 report, we are presently looking at New START implementation plans that are "at or very near the limits imposed by the New START Treaty." Any recommendations to depart from that approach would have to be based on the international situation and our deterrence, assurance and stability needs.

Regarding bringing states other than Russia into negotiated nuclear arms reductions, the New START negotiating position took into account our total force requirement involving all potential threats. As discussed in the Nuclear Posture Review, we should bring others into the "picture" now. But the "picture" is not necessarily limited to negotiated arms reductions. Rather, the nature and objectives of our interactions with others should be tailored to the countries involved.

Mr. TURNER. Would you support unilateral reductions in our nuclear forces, below the levels prescribed by New START? Would you support reductions if they are part of a non-binding agreement with Russia?

General KEHLER. I support the 13 October statement of Secretary of Defense Panetta: "With regards to reducing our nuclear arena, I think that is an area where I don't think we ought to do that unilaterally—we ought to do that on the basis of negotiations with the Russians and others to make sure we are all walking the same path." We are currently looking at New START force structures that are at or very near the limits contained in New START.

Mr. TURNER. General Kehler, your predecessor at U.S. Strategic Command, General Kevin Chilton, said in June 2010 that, with regards to the size of our nuclear arsenal, "I do not agree that it is more than is needed. I think the arsenal that we have is exactly what is needed today to provide the deterrent. And I say this in light of—when we talk about the non-deployed portion of the arsenal, it is sized to be able to allow us to hedge against both technical failures in the current deployed arsenal and any geopolitical concerns." Do you agree?

General KEHLER. The nuclear arsenal is sized to meet current policy and strategy objectives and manage technical and geopolitical risks. The non-deployed stockpile provides considerable flexibility to respond to operational issues, technical failures or breakthroughs, and geopolitical uncertainty. We annually review stockpile requirements to seek the most cost efficient force mix to provide deterrence capabilities and manage risk.

Mr. TURNER. How many military personnel have full or partial access to STRATCOM's OPLAN 8010? How many must have knowledge of its contents to fulfill their jobs and missions?

General KEHLER. Full access to all portions of OPLAN 8010 is limited to our most senior leadership. OPLAN 8010 is built on a full spectrum of missions (nuclear, conventional, and non-kinetic) that involve all levels of USSTRATCOM and its components. Because the majority of the base plan and supporting annexes are classified SECRET, military members with at least a SECRET clearance and need-to-know can be granted access. However, those portions of the plan do not include the details of our nuclear employment planning. Some portions of the plan contain data which are classified at a higher level, including those portions that include the details of our nuclear employment planning, and access to those portions is limited accordingly.

no answer

Mr. TURNER. When does our current force of Minuteman III ICBMs start aging out? What life extension programs are currently underway for the ICBMs?

a. What assessments or surveillance are we doing related to aging in the ICBM force?

b. What are our plans or programs to extend the life of our Minuteman III ICBMs? When must the decision be made to proceed with life extension?

c. What are our plans or programs to replace the Minuteman III ICBM force? When must the decision be made on a replacement program?

General KEHLER. We are confident Minuteman is sustainable through mid-2020s and are engaged with the Air Force to identify any additional steps required to sustain Minuteman through 2030. The Air Force is refurbishing the propulsion system rocket engines and warhead fuzes, making improvements to depot and field support equipment, and security and C2 sub-systems.

A. The Air Force conducts a comprehensive aging and surveillance program and reports the results to USSTRATCOM. The surveillance and testing program includes ground and flight testing. Results are used to assess performance of the weapon system and provide insights on the need for refurbishment and replacement programs.

B. The current Air Force plan is to extend Minuteman through component replacement. This program is ongoing and reflected in the PB12 budget. Major sub-systems being refurbished include the propulsion system rocket engine and warhead fuzes. Guidance and propulsion sub-systems require attention in the very near future to ensure performance through 2030. Additionally, the Air Force is making investments in advanced technology to support these future efforts.

C. Analysis is underway to support the Minuteman recapitalization. The Air Force plans to conduct a Ground Based Strategic Deterrent (GBSD) Analysis of Alternatives (AoA) to examine the full range of alternatives including mobile options, as directed by the NPR. The decision on investment for a Minuteman replacement depends on AoA findings. Early investments may be required in the FY14 budget. The goal is to ensure current and future investments on sub-systems are leveraged in the recapitalization solution.

Mr. TURNER. How do we support the industrial base for ICBMs and submarine-launched ballistic missiles? Please compare and contrast our approach to maintaining the industrial base for these two programs.

a. The committee has been informed that there is a low-rate production program in place for the D5 SLBM program. Is a similar program in place for Minuteman III?

b. Do you have any concerns related to the rocket motor industrial base, now that NASA has canceled so many of its human spaceflight programs? Is DOD shouldering too much of the burden in this area now?

General KEHLER. Various DOD solid rocket motor investments support the industrial base. DOD Director of Defense Research and Engineering (DDR&E) conducts science and technology (S&T) activities in propulsion in the Technology for Sustainment of Strategic Systems Program. The Air Force conducts propulsion Research Development Testing and Evaluation (RDT&E) activities in the Demonstration and Validation Program. The Navy D5 Life-Extension Program executes ongoing production of the D5 missile.

A. The Air Force conducts ongoing RDT&E efforts which could support a future low-rate production activity, if funded by the Air Force.

B. In order to support strategic systems, the DOD will bear an increased proportion of the industry's overhead costs. These increases will be reflected in ongoing production and future development programs. In addition, the U.S. needs to ensure the complete design-to-production industrial capability and suppliers are sustained. Loss of these capabilities would require numerous years and significant cost to reconstitute.

Mr. TURNER. General Kehler, your predecessor as commander of Strategic Command, General Kevin Shelton, said the following in June 2010: "The reason we have to maintain this large inventory is because we no longer have the ability to produce nuclear weapons in this country. The infrastructure has been allowed to decay and get to a point where we cannot do that. The Russians, on the other hand, have an ability to produce nuclear weapons. That is how they hedge. And so, this is why it's—I think, the NPR findings and the investments in the nuclear infrastructure and the personnel and expertise that is required to sustain the stockpile are so important so that by the time we get to next decade, we'll be in a position to look at our non-deployed arsenal and consider future reductions to that. But today, I think we have what we need to support the deterrent." Earlier this year, Administrator D'Agostino testified before this subcommittee that NNSA's new plutonium and uranium facilities—the Chemistry and Metallurgy Research Replacement (CMRR) facil-

ity in New Mexico and the Uranium Processing Facility (UPF) in Tennessee—need to be “up and running” before we make substantial cuts to the non-deployed stockpile. General Kehler, do you agree with these statements by General Chilton and Administrator D’Agostino?

a. Should “up and running” mean the facilities are being built, or should they have demonstrated actual production capability? What metrics should we be using to judge that the infrastructure is robust enough to support reductions in the non-deployed stockpile without undue risk?

b. General Kehler, would you please provide the military’s perspective on the link between nuclear modernization and the ability to reduce non-deployed weapons?

c. Do DOD and NNSA have a clear plan on what reductions in the non-deployed stockpile are possible or planned for the future, and how those reductions align with infrastructure and stockpile modernization milestones?

d. Has STRATCOM provided NNSA input regarding how many non-deployed weapons the military requires kept in the stockpile as a “hedge”? Please provide this information to the committee.

e. If nuclear modernization is delayed or postponed, can we reduce the size of the non-deployed stockpile? How many non-deployed nuclear weapons would STRATCOM want to see retained as a risk mitigation measure or “hedge”? If one or both of UPF and CMRR are delayed in getting “up and running,” what levels and types of non-deployed warheads would you recommend keeping in the stockpile as a risk mitigation measure or “hedge”? Please be specific.

General KEHLER. NNSA’s uranium and plutonium facilities are vitally important, but are not the only considerations associated with reductions in non-deployed weapons. There is a broader set of considerations including the stockpile’s condition, progress on life extension programs, and demonstrated infrastructure capabilities (existing or modernized). The current non-deployed stockpile’s purpose is to manage risk and we continuously assess and look for cost-efficient opportunities to mitigate risk.

A. For the infrastructure to have a significant role in risk mitigation there needs to be demonstrated production capabilities. Again, there is a broader set of considerations beyond capacity that influence non-deployed stockpile composition. For example, NNSA needs to demonstrate the ability to conduct surveillance, perform maintenance and execute weapon life extension programs on schedule.

B. As the U.S. currently has a limited production capacity, we rely on the non-deployed stockpile for the following reasons: 1) mitigate technical risk in our aging stockpile; 2) provide logistics spares to ensure efficient operations; 3) provide risk management for geopolitical uncertainty. The link is the ability of the infrastructure to assume some of these functions.

C. The SSMP reflects our current estimate of planned reductions in the non-deployed stockpile. Considerations that went into the development of the SSMP included alignment with stockpile modernization milestones and projected infrastructure capabilities. We conduct an annual process to evaluate and adjust stockpile size and composition to meet strategic deterrence requirements and manage risk.

D. We participate in an annual interagency process that proposes stockpile composition and is reviewed by the Nuclear Weapons Council and submitted to the President for approval. A document produced in support of this process contains a detailed breakdown of non-deployed weapons including those retained as a hedge. Release authority resides with the Chairman, Nuclear Weapons Council.

E. I consider three important elements of nuclear modernization: 1) sustainment activities needed to ensure a safe, secure, and effective stockpile and annual stockpile certification; 2) progress on longer-term life extension activities; and, 3) the infrastructure’s capacity to support the stockpile and assume some of the functions of the non-deployed hedge. An assessment of these elements is necessary to make informed recommendations on further reductions. It may be possible to make prudent reductions of the non-deployed stockpile without incurring operational risk. Again, from my perspective, the facilities are important, but are not the only considerations associated with non-deployed reductions.

Mr. TURNER. What are STRATCOM’s requirements for the Chemistry and Metallurgy Research Replacement (CMRR) facility and Uranium Processing Facility (UPF) in terms of capacity at each facility? When does STRATCOM need the facilities to be fully operational?

a. General Kehler, are you familiar with NNSA’s Stockpile Stewardship and Management Plan (SSMP), which projects a 20-year plan for NNSA facilities and assumes further reductions in the number of total warheads? Has STRATCOM fully endorsed that plan for the entire 20-year timeframe it covers? If not, up until when are NNSA and STRATCOM in agreement? As NNSA’s customer for the nuclear

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weapons it produces and sustains, is STRATCOM in full agreement with NNSA's SSMP plan?

General KEHLER. NNSA's uranium and plutonium facility capacity is important to sustain the stockpile, dismantle retired weapons, and support non-proliferation efforts. These facilities represent a national capability and they need to be updated. USSTRATCOM's requirement is for a capability to conduct surveillance, maintenance and life extensions in sufficient capacity to sustain our deployed and non-deployed stockpile.

A. I am familiar with the SSMP and was consulted during development through the Nuclear Weapons Council. The FY12 SSMP captures the planned activities needed to sustain a safe, secure and effective stockpile. There is DOD and NNSA consensus on the need to modernize the complex and agreement on projected stockpile quantities through FY2030. The stockpile requirements are reviewed annually by an inter-agency process to maintain stockpile effectiveness and manage risks. The plan's execution is dependent on a long-term commitment of funding.

Mr. TURNER. If we continue reducing the total number of nuclear weapons and delivery vehicles, there will naturally be a drive to reduce the number of types of weapons and delivery vehicles. We are already seeing this with consolidation of several B61 variants into a single variant, and the drive to study a common ICBM and SLBM warhead. Are we increasing technical risk by this consolidation—that is, are we increasing the consequences and likelihood of a technical failure that puts a large portion of the stockpile out of action? How are we dealing with this problem as we move towards a smaller stockpile?

General KEHLER. Reducing the total number of nuclear weapon types can allow us to cost effectively sustain capabilities without necessarily increasing technical risk. The principal technical risk is age related degradation. Therefore, comprehensive life extension programs that consolidate variants and improve reliability are more important than multiple weapon types. For example, today there are five aged B61 weapon types in stockpile. Upon completion of the planned B61 life extension there will be single B61 variant with improved long-term reliability. This reduces stockpile resource requirements needed for sustaining this air delivered capability. Likewise, introduction of commonality for multiple ballistic missile warheads increases operational flexibility and allows the reduction of non-deployed warheads retained as a hedge. Consolidation and commonality risk are further managed through acquisition strategies, comprehensive surveillance, and increased component testing over the life cycle.

Mr. TURNER. General Kehler, what are your views on warhead diversity? In what cases would you be comfortable going down to a single warhead or bomb for a leg of the triad or a particular delivery system? For example, why is it helpful to have a B61 and a B83 in terms of failure of one warhead type? Does your view change at smaller stockpile sizes?

General KEHLER. Warhead diversity and condition of the stockpile are important factors in our ability to mitigate the risk of technical failure. Given the "aged" condition of our nuclear weapons and limited production capacity of our complex, diversity becomes significant as we strive to maintain a credible deterrent over a range of potential risk scenarios. However, there is inherent flexibility in our Triad as we can mitigate risk of warhead failure in one leg with a warhead from another. We assess diversity and condition of the stockpile during our annual stockpile planning process.

Mr. TURNER. How would cutting a wing on ICBMs—150 missiles in total—affect STRATCOM's nuclear targeting? Could STRATCOM fulfill the nuclear targeting and employment guidance that exists today, if a wing of ICBMs were eliminated?

General KEHLER. ICBMs remain a valuable component of our nuclear deterrent force. They provide a prompt response option to the President and complicate an adversary's decision calculus in many ways. We are presently looking at a variety of force mixtures that would meet our deterrence objective and fulfill current nuclear targeting and employment guidance. Any decision by the President to reduce the ICBM force, or any other leg of the Triad, could require adjustments to the rest of the strategic force.

Mr. TURNER. Is STRATCOM involved in setting requirements for surveillance activities needed for sustainment and monitoring of the stockpile? How? Is STRATCOM comfortable with NNSA's current surveillance program—does it meet STRATCOM's needs and requirements?

General KEHLER. NNSA establishes the detailed surveillance requirements to ensure data is available to support annual stockpile certification. USSTRATCOM annually assesses the safety, security and military effectiveness of the stockpile based on surveillance findings. Our annual assessment process highlighted the need for the increased surveillance investment contained in the FY11 and FY12 budgets.

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These funding levels need to be continued to address the backlog of surveillance activities and improve understanding of our aging systems.

Mr. TURNER. After implementation of the New START Treaty and the NPR, what percentage of our strategic forces will be deployed on submarines?

a. Has the U.S. ever deployed so much of its deterrent on a single platform before? In other words, on one leg of the triad and on one type of submarine, ICBM, or bomber? What risks does the U.S. accept by doing so?

General KEHLER. Current plans detailed in the 1251 Report reflect a ~10% increase in accountable weapons on submarines over current levels.

A. In the early years of the Triad, bombers carried a significant percentage of our nuclear deterrent. As Triad systems developed, distribution of the deterrent became more balanced. The risk of technical failure or technological breakthrough on one leg of the Triad is mitigated by the unique and complimentary attributes of the Triad. Retaining all three legs is the best method to mitigate risk and maintain strategic stability.

Mr. TURNER. The NPR concluded that "the current alert posture of U.S. strategic forces ... should be maintained for the present." Please explain why the NPR reached this decision. What are the benefits of our current alert posture? Do you anticipate changes in this decision?

General KEHLER. In the NPR's comprehensive review assurance, deterrence, non-proliferation, ability to respond to technical and geopolitical challenges and the unlikely event of deterrence failure were considered when examining the nation's nuclear force posture. The posture today provides a responsive and survivable capability day-to-day to the President and it provides an ability to change the posture as necessary in response to a changed environment or crisis. We constantly review our force posture and will adjust it as needed to meet our strategic needs and the operational circumstances.

Mr. TURNER. How does the B61 Life Extension Program (LEP), which would consolidate several different versions of the B61 into a single B61-12 version, link to our extended deterrent in Europe?

a. What are the implications, both to our extended deterrent and more broadly, of delay in the B61 LEP?

b. Why is it important to increase surety in B61 warheads during the LEP?

General KEHLER. The B61 is critical to extended deterrence because it is the only weapon available for delivery by both heavy bombers and tactical fighter aircraft meeting NATO commitments. The LEP addresses critical components that are reaching end-of-life and require replacement and/or refurbishment. Consolidation into a B61-12 conserves resources and reduces life-cycle costs while enabling us to meet both our strategic and extended deterrence requirements.

A. Delay to the LEP timeline will increase risk in meeting the required number of weapons, with the required capabilities, for both strategic and extended deterrence requirements. In addition, there will likely be a substantial cost increase.

B. It is important to improve safety and security while maintaining the effectiveness of nuclear weapons during life extension. The upcoming planned life extension provides an opportunity to cost effectively make these improvements during a time period the nuclear complex has production capacity. It is a prudent course of action to improve surety given the threat of nuclear terrorism.

Mr. TURNER. When will a decision be made regarding how specifically our nuclear forces will be structured to comply with the New START Treaty? When will de-MIRVing of our ICBM forces begin to occur?

General KEHLER. Discussions regarding final nuclear force structure are ongoing. Force structure changes will be reflected in the annual 1251 Reports to Congress. Air Force plans to begin de-MIRVing in FY12.

Mr. TURNER. The 2010 Nuclear Posture Review (NPR) considered potential elimination of one or more legs of the triad, but ultimately decided to keep the full triad. General Kehler, in an interview two weeks ago, you said, "I continue to stand by the need for a triad." Please explain the benefits of the triad, and why you believe we still need it.

General KEHLER. I agree with the results of the NPR study that concluded that we should retain a nuclear triad under the New START Treaty. The triad provides an effective, flexible and resilient capability to deter potential adversaries, assure allies and partners, maintain strategic stability, and defend U.S. and allied interests should deterrence fail. Each leg of the triad provides unique capabilities, and presents an adversary with unique problems.

Mr. TURNER. General Kehler, B-52 and B-2 bombers are hardened to protect them from electromagnetic radiation in the event of a nearby nuclear detonation.

a. What will be the added cost to harden the next generation bomber, vs. leave it unhardened?

b. The Air Force has said it can save money by delaying nuclear certification and hardening of the next generation bomber until the current bombers are readying for retirement. When would this nuclear certification take place—what is the expected initial operational capability date for its nuclear role? Would the next generation bomber be hardened from the start, and just not certified initially? How much money would this save, and when would this savings be realized?

General KEHLER. A. The Air Force is not at the point in the development process that would enable a detailed cost estimate of platform hardening.

B. Testing and nuclear certification schedules have not been determined. We are in consultation with the Air Force as requirements are being developed. Certification needs to occur prior to a capability gap in our air leg. Our understanding is the new bomber will be built from the start to support the nuclear mission. Detailed cost comparisons are not yet available; however, it is more cost effective to nuclear harden early in development than trying to add these capabilities later.

Mr. TURNER. Before New START, the U.S. sea-based strategic deterrent mission was carried out with a force of 14 ballistic missile submarines (SSBN) with 24 missile tubes each. DOD has announced that to comply with New START limits, by 2018 we will have at most 14 SSBNs with 20 missile tubes each. The SSBN(X) "Milestone A" decision earlier this year indicates that when the *Ohio*-class replacement is fully deployed we will (make do) with 12 SSBNs with 16 missile tubes each.

a. General Kehler, if the reductions in the number of missile tubes and submarines proposed by the Navy's *Ohio*-class replacement "Milestone A" decision take place (from 24 to 16 missile tubes, and from 14 boats to 12), could you still meet the existing targeting and employment guidance that is in place today? Is the "Milestone A" decision anticipating changes in nuclear targeting and employment guidance?

b. To save money, some are proposing that we should further reduce the number of *Ohio*-class replacement submarines we buy, from 12 to 10, or 8, or even lower. General Kehler, given the decreased flexibility we will have by going to a lower number of tubes per boat, what is the minimum number of 16-tube boats we can procure and still meet deterrence and "at-sea" requirements?

c. Documents provided to the committee by the Navy show that the total cost of designing, building, and operating a fleet of 12 *Ohio*-class replacement boats with 20 missile tubes each would have been only 1.75% more (in current year dollars) than the total lifecycle cost of a 12-boat fleet with 16 missile tubes each. General Kehler, are you comfortable with this trade-off in flexibility to save 1.75% of the program's total lifecycle cost?

General KEHLER. A. The Milestone A decision did not assume any specific changes to targeting or employment guidance. Analyses considered a range of potential security environments, strategy requirements, and submarine force structures.

Contingent on funding, the first *Ohio* replacement submarine will be available for strategic service in 2029. While there is uncertainty about the future strategic environment and policy requirements, I am confident that a plan to procure 12 *Ohio* Replacement SSBNs with 16 missile tubes will meet deterrence requirements. The ultimate number of submarines and tubes will depend on a number of factors including our deterrence needs and funding.

B. The number of available SSBNs for strategic service is as important as the number of tubes. Today, 12 operational SSBNs are required to meet deterrence and at-sea requirements. The minimum number of *Ohio* Replacement SSBNs is based on an assessment of the security environment and requirements of the strategy at a given time. There is sufficient flexibility to adjust future force structure plans across the Triad, or if required, procure additional submarines.

C. Yes, I am comfortable with the cost-capability trade that was made to balance fiscal and operational considerations.

Mr. TURNER. Are you concerned about reports about China potentially increasing the MIRVing of its land- and sea-based ballistic missiles? How might this trend affect the nuclear balance and our nuclear policies 10 or 20 years from now? Are you concerned about reports of Russia developing and deploying new heavy, highly-MIRV'd, silo-based ICBMs? How would deployment of this system affect strategic stability and U.S. nuclear policies and strategies? Did the U.S. seek to ban such systems during New START negotiations?

General KEHLER. We take seriously all reports of Russian and Chinese strategic force modernization. Both countries have ambitious programs. In China's case, their efforts involve both modernization and expansion of their forces. However, while there is uncertainty regarding the intended scale of their force expansion, our current assessment is that it is unlikely to affect strategic stability. The possible Russian development and deployment of a new ICBM, which would be replacing an existing system, does not result in a significant change in their capabilities. How this

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or any new Russian system ultimately affects strategic stability depends on Moscow's success in deploying the new system and whether the Russians continue to honor their commitments under existing arms control regimes. In the New START negotiations, we did not seek to ban such systems.

Mr. TURNER. At the House Armed Services Committee's October 13 hearing, Secretary of Defense Panetta said, "With regards to reducing our nuclear arena, I think that is an area where I don't think we ought to do that unilaterally—we ought to do that on the basis of negotiations with the Russians and others to make sure we are all walking the same path." To ensure we are not reducing unilaterally, will we retain nuclear forces that are at—or very near—the limits on strategic forces imposed by the New START Treaty? Otherwise, wouldn't it by definition be "unilateral" reductions?

a. Would you support reductions if they were a part of a non-binding agreement with Russia?

b. At what force levels do we need to start bringing the "others" Secretary Panetta mentions, particularly China, into the picture?

Secretary TAUSCHER. a. Both during and after the Cold War, the United States and Russia have agreed to mutual, legally binding, verifiable limits on their strategic nuclear arsenals in order to prevent an arms race, increase transparency, and mitigate mistrust and surprises. These agreements have contributed to building trust and promoting stability in the relationship between the world's two largest nuclear powers. Unilateral reductions would not provide the same level of predictability and stability as agreed upon treaties because there would be no obligation to make or maintain them. Furthermore, there would be no verification regime associated with the reductions.

b. We are mindful of China's military modernization programs, including its nuclear modernization, and the lack of transparency surrounding them. We monitor carefully these developments and, in concert with our allies and partners, will adjust our policies and approaches, as necessary. However, China does not now appear to be seeking parity with either the United States or Russia, and its nuclear arsenal remains much smaller than the U.S. and Russian arsenals. As a declared nuclear weapon state under the NPT, China's restraint in its nuclear modernization is important to nuclear disarmament and global non-proliferation efforts. As the United States and Russia conduct bilateral negotiations to reduce nuclear arsenals further, the United States will seek to expand dialogue with China on the doctrine, force structure, and strategic modernization programs of our two countries to improve mutual understanding, build trust, and reduce the risk of misperception and miscalculation.

Mr. TURNER. Data exchanges and on-site inspections between the U.S. and Russia under the New START Treaty have begun. What are we learning from these exchanges and inspections? Are we learning anything that might facilitate making a future arms control treaty verifiable—specifically a potential future treaty focused on non-deployed warheads and/or non-strategic warheads?

Secretary TAUSCHER. One of the greatest contributions of the New START Treaty is its strong verification regime. This regime was developed to specifically verify the requirements of the New START Treaty. Negotiators worked very hard to find innovative new mechanisms to aid in the verification of this Treaty and the results from the first year of implementing the Treaty have been positive. On-site inspections are now being conducted routinely, as are the daily notification requirements that help track movements and changes in the status of systems. The New START Treaty data exchanges are providing us with a detailed picture of Russian strategic forces and the inspections give us crucial opportunities that we otherwise would not have to confirm the validity of the data required to support verification of the central limits of the New START Treaty.

As we implement New START, we're preparing for further nuclear reduction negotiations with Russia. To date, no previous arms control agreement has included provisions to limit and monitor nondeployed or nonstrategic warheads. Future limits on such warheads would require monitoring and verification different from those used in New START. While the New START Treaty's verification provisions are not intended to provide the United States or Russia any information on each side's non-deployed warheads and/or nonstrategic warheads, the verification regime will help by creating the foundation for future agreements.

Mr. TURNER. What are some of the technical and procedural challenges associated with verifying a potential future treaty with Russia that limits non-deployed and non-strategic weapons? What must be done to resolve these technical and procedural challenges? Do you believe a treaty that limits non-deployed and non-strategic weapons can be fully verifiable?

Secretary TAUSCHER. The monitoring and verification of any potential future treaty limitations on nondeployed or nonstrategic nuclear weapons will be more difficult due primarily to the relatively small physical size of the items to be limited. Security concerns will pose a significant technical challenge to our ability to confirm that an object being counted during routine inspection is actually what it is declared to be; similarly, we would have security concerns regarding Russian access to U.S. nuclear warheads. The fact that air, sea- and ground-launched nonstrategic nuclear weapons are primarily based on delivery vehicles whose primary mission is non-nuclear adds complexity to designing verifiable limits on these weapons.

Mr. TURNER. We have heard that within the Deterrence and Defense Posture Review (DDPR) process, some NATO allies might be encouraging several changes to NATO's nuclear posture, possibly including: (1) consolidation of U.S. nuclear forces in Europe to one or more centralized bases, (2) decreasing the number of dual-capable aircraft our allies are required to maintain, (3) relaxing or eliminating requirements for pilots from allied nations to be trained and exercise in the nuclear mission, and (4) potential removal of U.S. nuclear weapons from Europe.

- a. Are any of these actions being considered by the DDPR? Which ones?
- b. Would NATO and the U.S. consider taking any of these steps unilaterally, without reciprocal and proportionate action on the part of Russia?

i. What actions would we consider taking unilaterally, and what actions would we only undertake bilaterally with Russia?

ii. What reciprocal actions would the U.S. look for from Russia in exchange for any of these four actions?

Secretary TAUSCHER. The principle task of the Deterrence and Defense Posture Review (DDPR) is to determine the appropriate mix of political and military instruments including conventional, nuclear, and missile defense forces that NATO will need to meet 21st-century security challenges. Alliance nuclear policy will be a key element of the review and there are no pre-ordained outcomes. NATO Allies agreed in the new Strategic Concept that sharing of nuclear risks and responsibilities is fundamental. We believe it is important to share the burden of the nuclear mission as broadly as possible. How best to accomplish this in the future is an issue we are committed to addressing in the DDPR.

In its Strategic Concept, adopted in November 2010, NATO declared: "In any future reductions, our aim should be to seek Russian agreement to increase transparency of its nuclear weapons in Europe and relocate these weapons away from the territory of NATO members. Any further steps must take into account the disparity with the greater Russian stockpiles of short-range nuclear weapons."

The DDPR consultations will help to inform the appropriate posture for forward-based U.S. nonstrategic nuclear weapons in Europe; however, we do not expect that NATO would take steps to eliminate its nuclear capabilities in the absence of reciprocal steps by Russia.

As National Security Advisor Donilon explained on March 29, 2011: "We will work with our NATO allies to shape an approach to reduce the role and number of U.S. tactical nuclear weapons, as Russia takes reciprocal measures to reduce its nonstrategic force and relocates its nonstrategic forces away from NATO's borders."

Mr. TURNER. Are our NATO allies still planning to purchase dual-capable F-35s to replace their aging dual-capable aircraft? How many do they plan to purchase and when? Please describe the plans for NATO countries to replace or modernize their nuclear-capable aircraft, including numbers of aircraft and timelines for purchase. How are these plans being reflected in the DDPR?

Secretary TAUSCHER. All NATO Allies agreed in the new Strategic Concept that the sharing of nuclear risks and responsibilities is fundamental and we believe it is important to share the burden of the nuclear mission as broadly as possible. Dual-capable aircraft and crews are one of the key ways to share the burden of the nuclear mission and as long as forward-based U.S. nonstrategic nuclear weapons remain in Europe, the Alliance needs to commit the resources necessary to maintain that capability. How best to accomplish this in the future is an issue that will be determined following the completion of the DDPR.

Mr. TURNER. The 2010 Nuclear Posture Review (NPR) says that "the presence of U.S. nuclear weapons—combined with NATO's unique nuclear sharing arrangements under which non-nuclear members participate in nuclear planning and possess specially configured aircraft capable of delivering nuclear weapons—contribute to Alliance cohesion and provide reassurance to allies and partners who feel exposed to regional threats."

- a. Please explain how the presence of nuclear weapons in Europe contributes to NATO cohesion, reassurance, and stability.
- b. In particular, which NATO allies value these nuclear weapons and "feel exposed to regional threats"?

c. Will unanimity among NATO members be required before any major changes are made to our nuclear posture in Europe? What sorts of changes to our nuclear posture in Europe might we undertake without unanimity of NATO members?

Secretary TAUSCHER. All NATO Allies agreed in the 2010 Strategic Concept that deterrence, based on an appropriate mix of nuclear and conventional capabilities, remains a core element of NATO's overall strategy. Allies also agreed collectively that the circumstances in which ~~any~~ use of nuclear weapons might have been contemplated are ~~extremely~~ remote, but as long as nuclear weapons exist, NATO will remain a nuclear alliance. NATO's unique nuclear burden-sharing arrangements assure each member state of the strength of the U.S. commitment to collective defense, easing fears of exposure to regional threats that may arise. The nuclear burden-sharing arrangements also assure the United States that NATO Allies would be key partners in any future and immensely difficult decisions regarding nuclear employment on behalf of NATO. The role of nuclear weapons in defending Alliance members and the threat environment confronting the Alliance are being discussed as part of NATO's Deterrence and Defense Posture Review. Any changes in NATO's nuclear posture, including forward-based U.S. nonstrategic nuclear weapons in Europe, will be taken after a thorough review within—and decisions by—the Alliance as a whole.

Mr. TURNER. Germany and Norway have put forward ideas in the DDPR process to increase transparency in NATO's nuclear mission and NATO's nuclear forces. What transparency measures are being considered?

a. What NATO transparency measures are the U.S. comfortable with NATO doing unilaterally (i.e., without reciprocal and proportionate action by Russia)?

b. What NATO transparency measures would we only consider doing bilaterally based on agreements with Russia? Would you anticipate such bilateral agreements being based on non-binding agreements or through some sort of binding treaty or agreement?

c. How does the administration define "transparency"? How does it define "verification"? How are the two concepts related?

Secretary TAUSCHER. In advance of a new treaty limiting all types of nuclear weapons, we plan to consult with our Allies on reciprocal actions that could be taken on the basis of parallel steps with Russia. At the NATO Foreign Ministerial in Berlin on April 14–15, Poland, Norway, Germany and the Netherlands submitted a non-paper suggesting ways to increase transparency and build confidence with Russia. After the receipt of this non-paper, NATO's North Atlantic Council (NAC) tasked the Weapons of Mass Destruction Control and Disarmament Committee (WCDC) to provide input into the DDPR on possible options for reciprocal measures to reinforce and increase transparency, mutual trust and confidence with Russia. In the WCDC, NATO is now developing transparency and confidence-building options that could be pursued on a reciprocal basis with Russia. Initially, we would like to increase transparency on a reciprocal basis on the numbers, locations, and types of nonstrategic forces in Europe. Any transparency measures on U.S. NSNW forward-based in Europe would require Alliance agreement.

Transparency builds stability and security by helping to ensure against strategic surprise and by building the necessary confidence for force planning based on a realistic view of the current and likely force levels of others. Verification, the process by which we gather and analyze information to make a judgment about parties' compliance or non-compliance with an agreement, is an integral part of the arms control regime. This Administration, as well as previous Administrations before it, evaluates effective verification of nuclear arms control agreements based on our ability to detect militarily significant violations before they become a threat to our national security. As stated in the 1992 report on START Treaty verifiability to the Senate Foreign Relations Committee:

"A key criterion in evaluating whether a START agreement is effectively verifiable is whether, if the other side attempts to move beyond the limits of the Treaty in any militarily significant way, we would be able to detect such a violation well before it becomes a threat to national security so that we are able to respond. Additionally, the verification regime should enable us to detect patterns of other violations that, while they do not present immediate risks to U.S. security, could, if left unchallenged, encourage actions that would pose such risks."

At least to the extent the parties trust in the information they receive through transparency measures, such measures can help bolster our confidence in the verifiability of a relevant arms control agreement.

Mr. TURNER. How does the B61 Life Extension Program (LEP), which would consolidate several different versions of the B61 into a single B61-12 version, link to our extended deterrent in Europe?

a. What are the implications, both to our extended deterrent and more broadly, of delay in the B61 LEP?

b. Why is it important to increase surety in B61 warheads during the LEP?

Secretary TAUSCHER. The B61 bombs assigned to support NATO are intended to provide for the collective security of all Alliance members. The B61 bombs couple U.S. and NATO security, and tangibly assure the members of NATO that the United States is committed to their national security. NATO is currently in the process of reviewing its nuclear posture as part of the Deterrence and Defense Posture Review and there are no pre-ordained outcomes. However, as long as forward-based U.S. nonstrategic nuclear weapons remain in Europe the Alliance needs to commit the resources necessary to maintain that capability and the B61 LEP is an important element of that.

Mr. TURNER. Mr. Franks asked for several pieces of information, but I wanted to reiterate those requests and add one of my own. Please provide the information requested within two weeks:

a. In your recent remarks at the Atlantic Council, you stated the following, "the Obama Administration's approach provided more protection sooner against the existing threat, using proven systems, and at a lower cost than the previous proposal." Your legislative affairs staff was asked to provide this committee the basis for the statement "at a lower cost than the previous proposal." Please provide the information requested to the committee within two weeks.

b. Please provide this committee, within two weeks, a comprehensive, whole-of-the-federal-government cost for each phase of the EPAA.

c. We understand the Department of State is advocating the return of export control responsibility for commercial satellites and their related components to the Department of Commerce. I also understand the Department of State contracted with the Aerospace Corporation, through Project West Wing, to develop a Counter Space Technology List. Our committee staff has been asking for this list for over a month, with no progress. Please provide a copy of this report to the committee within two weeks.

Secretary TAUSCHER. a. One element of the basis for the statement is that the Standard Missile (SM)-3, at around \$10 million per interceptor, is much cheaper than a GBI, which costs approximately \$60 to \$70 million per interceptor. This means that we can deploy many more SM-3 interceptors than GBIs at the same cost. Since Iran already possesses hundreds of short- and medium-range ballistic missiles, this additional defensive capability is critical. In addition, the EPAA (European Phased Adaptive Approach) relies on capabilities that are mobile and relocatable, so additional capabilities can "surge" into the region in a crisis. Furthermore, the deployment of the AN/TPY-2 radar to Turkey will also greatly improve U.S. and NATO's capability to protect against the existing threat from short- and medium-range ballistic missiles.

It is important to note that the EPAA is not an acquisition program but a policy framework for delivering capabilities of which the principal attribute is flexibility. By design, it can be enhanced, expanded, and supplemented in each phase.

b. The Department of Defense would be the appropriate organization to provide a cost estimate of the EPAA.

c. The Department of State, after consultation with the Department of Defense, is advocating the return of export control responsibility for commercial satellites and their related components to the Department of Commerce, while retaining State Department jurisdiction over sensitive military and intelligence related satellites, components, and technology. The Counterspace Sensitive Technology List (CSTL) is an ongoing research and analytical project which is projected to be completed in late 2012. In short, there is no finished report or list to provide at this time. We would be pleased to provide a classified briefing to the committees of jurisdiction on the CSTL effort.

Mr. TURNER. What are some of the technical and procedural challenges associated with verifying a potential future treaty with Russia that limits non-deployed and non-strategic weapons? What must be done to resolve these technical and procedural challenges? Do you believe a treaty that limits non-deployed and non-strategic weapons can be fully verifiable?

Mr. D'AGOSTINO. A future treaty that includes limits on non-deployed and non-strategic weapons could pose technical and procedural challenges, depending on the specific terms of the treaty. From the perspective of the National Nuclear Security Administration (NNSA), one of the technical challenges that we are investigating to help inform future decisions is warhead authentication, especially for non-deployed warheads. In particular, we are investigating the technical means to provide confidence that an object declared to be a nuclear warhead is a warhead through radiation and other measurement techniques. This is different from the New START

ernance model coordinates key surveillance activities to assure that each weapon system maintains a current technical basis to determine its respective requirements; all systems requirements are integrated into an executable plan; appropriate diagnostics are developed and deployed; and the surveillance plan is funded and supported by senior NNSA management.

Surveillance requirements are identified by Sandia, Los Alamos, and Lawrence Livermore National Laboratories and provided to the NNSA production agencies to perform the necessary inspections, testing, and capture of data. The primary goal of the Surveillance Program is to identify any design or manufacturing defects either in newly produced or in stockpiled weapons and weapon components, as well as, detect any issues related to deployment or aging of the weapons. Each weapon system has an integrated weapon evaluation plan that projects out 6 years.

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a. What are the implications, both to our extended deterrent and more broadly, of delay in the B61 LEP?

b. Why is it important to increase surety in B61 warheads during the LEP?

Mr. D'AGOSTINO. The B61-12 LEP plan submitted by NNSA has a central theme of consolidating multiple legacy versions of the B61 that are currently deployed in the U.S. and abroad. As a result, the B61-12 will provide a modernized extended deterrent in Europe. Our planned deployment schedule will ensure that no gap in extended deterrent capability will occur, and will ensure seamless replacement of legacy B61 systems with the modernized B61-12.

The implications of a delay in the B61-12 LEP have been studied by NNSA and DOD as part of our LEP alternatives analysis. NNSA has coordinated mitigation strategies with the Department of Defense for the contingency of a delayed B61 LEP. If the proposed LEP is significantly delayed, several critical and costly activities must be pursued to temporarily stabilize the capabilities of legacy deployed B61 systems. For the time period of the delay, more rigorous surveillance activities must be performed to ensure an adequate state of readiness is maintained for this aging legacy element of the stockpile.

The B61 bomb variants have some of the most advanced safety and use control features in the current stockpile. However, these features are aging and designed for Cold War threats. The life extension program provides the opportunity to improve weapon safety and security especially against new, emerging threats of the 21st century. The B61 LEP will incorporate improvements to the existing surety features without significant risk of schedule delays and will balance the B61 investments with those needed in other weapon LEPs. The design approach will facilitate future surety upgrades as threats to our nuclear deterrent evolve.

Mr. TURNER. How many nuclear warheads does Russia make each year? What is our estimate for how many it can make? How does this compare to actual U.S. production and our potential production capacity?

Mr. D'AGOSTINO. The NNSA is responsible for the warheads in the U.S. nuclear weapons program. Questions about a foreign nuclear weapon program should be answered by the Intelligence Community or the Department of Defense.

QUESTIONS SUBMITTED BY MS. SANCHEZ

Ms. SANCHEZ. General Kehler has stated recently that "We're not going to be able to go forward with weapon systems that cost what weapon systems cost today ... Case in point is [the] Long-Range Strike [bomber]. Case in point is the Trident [submarine] replacement.... The list goes on." In addition, Admiral Mullen before he retired as Chairman of the JCS said: "At some point in time, that triad becomes very, very expensive, you know, obviously, the smaller your nuclear arsenal is. And it's—so at some point in time, in the future, certainly I think a decision will have to be made in terms of whether we keep the triad or drop it down to a dyad."

Can the U.S. guarantee its security and that of its allies in a more fiscally sustainable manner by pursuing further bilateral reductions in nuclear forces with Russia and scaling back plans for new and excessively large strategic nuclear weapons systems and warhead production facilities?

Dr. MILLER. I believe that if properly structured, reductions below New START levels with Russia could reduce costs to the United States, while strengthening deterrence of potential regional adversaries, strategic stability vis-à-vis Russia and China, and assurance of our Allies and partners. At the same time, as noted in the Nuclear Posture Review, Russia's nuclear force will remain a significant factor in determining how much and how fast we are prepared to reduce U.S. forces.

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Ms. SANCHEZ. Do you have any concerns about the provisions related to nuclear weapons employment and that could limit or delay nuclear weapons reductions, which were included in the House National Defense Authorization bill?

Dr. MILLER. Sections 1055 and 1056 of H.R. 1540 would impinge on the President's authority to implement the New START Treaty and establish U.S. nuclear weapons policy. Moreover, it would set onerous conditions on the Administration's ability to direct the retirement, dismantlement, or elimination of non-deployed nuclear weapons.

This legislation would dictate the pace of reductions under New START Treaty in a way that would bar DOD and DOE from exploring the best means to implement reductions, could preclude DOD from being logically able to meet New START Treaty timelines, and would add disruptions and costs at a time when our country and the nuclear enterprise can ill afford them. Notably, it would set conditions on New START Treaty implementation and divert resources from stockpile sustainment in ways that tax the very programs that the House Appropriations Committee has just cut drastically.

Further, Section 1056 raises constitutional concerns, as it appears to encroach on the President's authority as Commander in Chief to set nuclear employment policy.

Ms. SANCHEZ. In testimony before the Senate Foreign Relations Committee in June 2010, former National Security Advisor Brent Scowcroft stated: "Some things [nuclear weapons] need to be modernized in order to be safe, secure and reliable. Other things don't need to be. And I would not put modernization itself as a key to what we need to—we need to do."

Do you agree with this statement?

Dr. MILLER. I agree that nuclear weapons need to be modernized (e.g., through warhead life extension programs) in order to be safe, secure, and reliable. This modernization does not require the development of new nuclear weapons.

Ms. SANCHEZ. What are the projected costs of, and associated decision points, related to, development and production of a new nuclear bomber, a new Air-Launched Cruise Missile, and a new ICBM?

Dr. MILLER. The President's Budget for Fiscal Year (FY) 2012 contains \$3.7 billion across FY 12–16 for a new, long-range penetrating bomber. The program would use a streamlined management and acquisition approach to balance capability with affordability by utilizing existing and mature technologies to the maximum extent. Additionally, the Air Force would limit requirements based on affordability using a realistic cost target to inform capability and cost trade-offs. The program plans to hold unit costs to the established targets to ensure sufficient production and a sustainable inventory over the long term for approximately 80 to 100 aircraft. The Air Force estimates an initial capability in the mid-2020s.

The current funding for a new Air-Launched Cruise Missile, also known as Long-Range Standoff, is \$884.3 million across FY 2012–16. The cost of this missile will be further refined when a materiel solution is selected as a product of the ongoing Analysis of Alternatives that is scheduled for completion in FY 2013.

The Air Force will begin a Ground-Based Strategic Deterrence Capability-Based Analysis of Alternatives in FY 2013. This assessment supports development of an Initial Capabilities Document, and will establish a baseline of requirements for a future Inter Continental Ballistic Missile (ICBM) replacement program.

Ms. SANCHEZ. Would the ALCM require a new warhead?

Dr. MILLER. No. The Administration committed in the Nuclear Posture Review to sustaining a safe, secure, and effective nuclear arsenal without developing new nuclear warheads. However, a new ALCM would require a decision regarding how to conduct a life extension program for the ALCM warhead.

Ms. SANCHEZ. Under the data provided by the New START verification regime, Russia's nuclear forces were actually at one point under the New START limits that must be met by 2018, but now have risen slightly. Russia is deploying one new missile, the RS-24—a missile I would note that U.S. inspectors got to examine up close solely because New START came into force—and I believe Russia is also proposing a new 10-warhead missile.

What can we do to discourage Russia from developing and fielding new weapons?

Dr. MILLER. Under the New START Treaty, each country is permitted to shape and modernize its forces to meet their respective strategic requirements. There is little we can do to discourage Russia from developing and fielding new nuclear weapons as long as they remain within the limits of the Treaty. Russia continues to modernize its force to replace aging systems and to meet what it views as its strategic needs. The United States is also modernizing nuclear systems as allowed under the New START Treaty.

Ms. SANCHEZ. In the context of New START negotiations, how many deployed strategic warheads did the U.S. military conclude that it needed to fulfill the exist-

ing targeting requirements established by the Bush administration in their nuclear policies.

And how many deployed strategic warheads are needed following the analysis of the 90-day NPR implementation review based on the different options that will be presented to the President?

Dr. MILLER. I would be glad to brief the committee leadership with a classified briefing to answer the first question. I cannot answer the second question because at this time no options have been finalized for presentation to the President.

[OSD provided briefing to Ranking Member Sanchez on the number of deployed strategic warheads as part of a classified brief by Under Secretary Miller and General Kehler on July 10, 2012.]

Ms. SANCHEZ. The Nuclear Posture Review emphasizes the importance of reducing the role of nuclear weapons in U.S. security policy, an approach that makes sense in a world where such weapons are the only existential threat to the United States.

Can you give us some examples of how the United States can further reduce the role of nuclear weapons?

Can you tell us how and what further reductions in the size of the U.S. stockpile would be possible based on current and foreseeable requirements, and what assumptions about nuclear weapons technology and geopolitics in the next decades factor into these requirements?

Dr. MILLER. The United States continues to explore options to reduce the role of nuclear weapons. In a regional context, continued development of conventional capabilities and missile defenses can strengthen non-nuclear deterrence and so help to reduce reliance on nuclear weapons. In addition, implementation of the Stockpile Stewardship Program and investments in our nuclear infrastructure will allow the United States over time to shift away from retaining large numbers of non-deployed warheads as a hedge against technical or geopolitical surprise, allowing major reductions in the nuclear stockpile. To date, no final decisions have been made with respect to future force structure or the modernization plans for nuclear delivery systems. The Department of Defense is close to concluding the NPR Implementation Study, which will inform future decisions.

Ms. SANCHEZ. What assumptions underlie and inform the options presented to the President?

Dr. MILLER. The key assumption that informs the options being developed is that the goals of the Nuclear Posture Review (NPR) remain valid: to prevent nuclear proliferation and nuclear terrorism; to reduce the role of U.S. nuclear weapons in U.S. national security strategy; to maintain strategic stability and deterrence at reduced nuclear force levels; to strengthen regional deterrence and reassure our Allies and partners of the credibility of the U.S. nuclear umbrella and other security commitments; and to sustain a safe, secure, and effective nuclear deterrent.

Ms. SANCHEZ. What is the cost of forward-deploying tactical nuclear weapons in Europe? Please provide detailed cost break-down (in classified form if necessary).

How are these costs shared between the U.S. and host countries?

Dr. MILLER. DOD estimates the annual operating costs for the United States to support forward deployed nuclear weapons in Europe is approximately \$100 million per year on average, as shown in the below table.

Fiscal Year (FY)(\$M)	FY12	FY13	FY14	FY15	FY16	FYDP
Officer	7.2	7.3	7.5	7.7	7.9	37.6
Enlisted	66.7	68.9	71.1	73.4	76.3	356.4
Operations & Maintenance	2.3	2.4	2.5	2.5	2.5	12.2
Security Investments	0.0	23.0	44.0	0.0	0.0	67.0
Weapon Storage Systems	2.8	2.4	2.4	2.3	2.4	12.3
Transportation Costs	2.9	2.9	2.9	2.9	2.9	14.5
Total	81.9	106.9	130.4	88.8	92.0	500.0

Beyond the above costs, Host Nations fund all facility and installation costs at the Munitions Support Squadrons locations. In addition to facility and installation costs, NATO funded \$14.7M in FY 2011 to develop and procure a replacement weapon maintenance vehicle for all weapon sites and \$63.4M in FY 2011–2012 in security upgrades for munitions storage sites.

Ms. SANCHEZ. General Kehler, you've stated recently that "We're not going to be able to go forward with weapon systems that cost what weapon systems cost today ... Case in point is [the] Long-Range Strike [bomber]. Case in point is the Trident [submarine] replacement The list goes on." In addition, Admiral Mullen before

he retired as Chairman of the JCS said: "At some point in time, that triad becomes very, very expensive, you know, obviously, the smaller your nuclear arsenal is. And it's—so at some point in time, in the future, certainly I think a decision will have to be made in terms of whether we keep the triad or drop it down to a dyad."

Can the U.S. guarantee its security and that of its allies in a more fiscally sustainable manner by pursuing further bilateral reductions in nuclear forces with Russia and scaling back plans for new and excessively large strategic nuclear weapons systems and warhead production facilities?

General KEHLER. U.S. policy is to maintain strategic deterrence, strategic stability, and assure our allies with the lowest possible number of nuclear weapons. The President has certified to Congress he will seek negotiations with the Russian Federation for an agreement on non-strategic nuclear weapons stockpiles of Russia and the U.S. and to reduce tactical nuclear weapons in a verifiable manner. I believe our triad of strategic nuclear weapons systems and our nuclear weapons infrastructure need to be sustained and modernized and there are opportunities to do so in a cost effective and affordable manner. New START provides the necessary flexibility to examine alternatives while meeting our national security policy objectives.

Ms. SANCHEZ. Do you have any concerns about the provisions related to nuclear weapons employment and that could limit or delay nuclear weapons reductions, which were included in the House National Defense Authorization bill?

General KEHLER. As the combatant commander responsible for managing forces and implementing the New START, I am concerned reporting requirements and waiting periods have the potential to impact New START implementation. Additionally, I am concerned that some provisions could divert resources from critical stockpile sustainment efforts and delay prudent reductions to the non-deployed stockpile. In my view, existing consultative processes (e.g., 1251, Stockpile Stewardship and Management Plan) ensure we work jointly with Congress to implement New START and manage the stockpile.

Ms. SANCHEZ. In testimony before the Senate Foreign Relations Committee in June 2010, former National Security Advisor Brent Scowcroft stated: "Some things [nuclear weapons] need to be modernized in order to be safe, secure and reliable. Other things don't need to be. And I would not put modernization itself as a key to what we need to—we need to do."

Do you agree with this statement?

General KEHLER. We need to sustain a safe, secure and effective nuclear deterrent. We have reached a critical point where investment is required to sustain the weapons, perform life extensions for substantial pieces of our deterrent, and modernize the complex. The current plans in the 1251 Report detail our best estimates for actions needed to sustain the stockpile while meeting our deterrence requirements.

Ms. SANCHEZ. What are the projected costs of, and associated decision points, related to, development and production of a new nuclear bomber, a new Air-Launched Cruise Missile, and a new ICBM?

General KEHLER. The 1251 Report contains the most current projected costs for the new bomber, ALCM follow-on, and Minuteman follow-on. These estimates will be refined as the Air Force conducts the requirements and acquisition processes for each platform and future 1251 Reports will be updated accordingly. The current Air Force plan projects a technology development decision for the ALCM follow-on in FY14. Specific plans for the new bomber are in development. The Minuteman follow-on is dependent on the Ground Based Strategic Deterrent Analysis of Alternatives which is scheduled to begin in FY13.

Ms. SANCHEZ. Would the ALCM require a new warhead?

General KEHLER. The current ALCM warhead is sustainable with investments by the Air Force and NNSA until 2030. The next-generation cruise missile will require a life-extended warhead.

Ms. SANCHEZ. Under the data provided by the New START verification regime, Russia's nuclear forces were actually at one point under the New START limits that must be met by 2018, but now have risen slightly. Russia is deploying one new missile, the RS-24—a missile I would note that U.S. inspectors got to examine up close solely because New START came into force—and I believe Russia is also proposing a new 10-warhead missile.

What can we do to discourage Russia from developing and fielding new weapons?

General KEHLER. The New START Treaty was explicitly designed to permit both countries to shape and modernize their forces to match their requirements as they see fit within the treaty's limits. In contrast to the United States, Russia is today conducting a modernization of their force in part to serve as replacements for existing systems that have exceeded or are ending their service lives and more generally

to meet their perceived geopolitical needs. To some degree, the United States will be conducting similar modernization efforts in the later half of this decade and the next. As discussed in the NPR, I believe the way forward is to place "importance on Russia joining us as we move to lower levels."

Ms. SANCHEZ. In the context of New START negotiations, how many deployed strategic warheads did the U.S. military conclude that it needed to fulfill the existing targeting requirements established by the Bush administration in their nuclear policies.

And how many deployed strategic warheads are needed following the analysis of the 90-day NPR implementation review based on the different options that will be presented to the President?

General KEHLER. As part of the Nuclear Posture Review the military conducted extensive studies to inform the U.S. negotiation position for the New Start Treaty. The resultant treaty level reflects the military's identified requirements. The follow-on analysis directed in the NPR (aka "90 Day NPR implementation review") is ongoing and thus it would be premature to describe the content of these discussions.

Ms. SANCHEZ. The Nuclear Posture Review emphasizes the importance of reducing the role of nuclear weapons in U.S. security policy, an approach that makes sense in a world where such weapons are the only existential threat to the United States.

Can you give us some examples of how the United States can further reduce the role of nuclear weapons?

Can you tell us how and what further reductions in the size of the U.S. stockpile would be possible based on current and foreseeable requirements, and what assumptions about nuclear weapons technology and geopolitics in the next decades factor into these requirements?

General KEHLER. The ongoing follow-on analysis directed in the NPR is examining these issues in detail and thus it would be premature to describe the content of these discussions.

Ms. SANCHEZ. Do you have any concerns about the provisions related to nuclear weapons employment and that could limit or delay nuclear weapons reductions, which were included in the House National Defense Authorization bill?

Secretary TAUSCHER. The May 24, 2011, Statement of Administration Policy on H.R. 1540 made clear that the Administration had serious constitutional concerns with sections 1055, 1056, and 1230. Sections 1055 and 1056 would impinge on the President's authority to implement the New START Treaty and to set U.S. nuclear weapons policy. Similarly, section 1230 would limit the president's ability to address tactical nuclear weapons, a step called for in the Senate's Resolution of Ratification of the New START Treaty.

Ms. SANCHEZ. Under the data provided by the New START verification regime, Russia's nuclear forces were actually at one point under the New START limits that must be met by 2018, but now have risen slightly. Russia is deploying one new missile, the RS-24—a missile I would note that U.S. inspectors got to examine up close solely because New START came into force—and I believe Russia is also proposing a new 10-warhead missile.

What can we do to discourage Russia from developing and fielding new weapons?

Secretary TAUSCHER. Under New START, each Party retains the right to determine for itself the structure and composition of its strategic forces within the Treaty's overall limits. This provides both Parties to the Treaty with the flexibility to deploy, maintain, and modernize its strategic nuclear forces in the manner that best protects its national security interests. However, modernization must occur within the central limits of the Treaty. The Treaty limitations on U.S. and Russian forces, combined with mechanisms to verify compliance, will provide predictability, transparency, and stability in the U.S.-Russian strategic relationship at lower nuclear force levels.

Ms. SANCHEZ. Are we taking the necessary steps to build verification requirements into the CMRR and UPF facility designs to preserve flexibility for future arms control agreements?

Secretary TAUSCHER. While designs for CMRR (Chemistry and Metallurgy Research Replacement) and UPF (Uranium Processing Facility) are flexible, specific verification requirements of future agreements are unknown. The UPF facility design has been evaluated and determined to have an appropriate level of transparency within the ongoing design to accommodate potential activities that could be related to future treaty obligations. UPF can accommodate access, and appropriate areas for monitoring and measuring of fissile material for inspection teams. The CMRR Nuclear Facility is not considered a production facility and is not anticipated to be subject to routine inspections.

QUESTIONS SUBMITTED BY MR. LAMBORN

Mr. LAMBORN. Dr. Miller, in response to a question during this subcommittee's March 31, 2011 hearing on the budget for missile defense programs, your deputy, Dr. Brad Roberts stated, "The Administration is considering additional steps to strengthen the U.S. hedge posture ... we are evaluating the deployment timelines associated with fielding additional capabilities ... we have committed to brief the Committee on the results of this work ... once it is complete." And, you Dr. Miller, during this subcommittee's March 2 hearing, stated "the Department is in the process of finalizing and refining its hedge strategy, and we will be pleased to brief this subcommittee on the results in a classified setting when it is complete." Dr. Miller, here we are eight months later and the Department has not released its hedging strategy. When can we expect to see it?

Dr. MILLER. The analysis conducted for the hedge strategy is informing the budget decisions under consideration as part of the development of the Department's fiscal year 2013 budget request. The Department will ensure that Congress is briefed on the results of the hedge strategy in early 2013.

Mr. LAMBORN. Do you agree with Secretary Gates who said at the Shangri-La Dialogue in Singapore in June, "With the continued development of long-range missiles and potentially a road-mobile intercontinental ballistic missile and their continued development of nuclear weapons, North Korea is in the process of becoming a direct threat to the United States." And two weeks later he said, "North Korea now constitutes a direct threat to the United States. The president told [China's] President Hu that last year. They are developing a road-mobile ICBM. I never would have dreamed they would go to a road-mobile before testing a static ICBM. It's a huge problem. As we've found out in a lot of places, finding mobile missiles is very tough." Do you concur with Secretary Gates' statements? Was the question of a North Korean road-mobile missile factored in to the decision in 2009 to abandon the Third Site and the deployment of 44 ground based interceptors at the missile fields at Fort Greely and Vandenberg Air Force Base? If North Korea begins fielding an array of road mobile ICBMs, and if they proliferate this technology to Iran and other countries as in the past, what does such activity do to current judgments about the adequacy of the current inventory of GBIs?

Dr. MILLER. I agree with Secretary Gates' assessment that North Korea constitutes a direct threat to the United States, as it does to our South Korean and Japanese allies. North Korea's nuclear ambitions and continued development of long-range missiles remain a primary focus of the development and deployment of the Ballistic Missile Defense System (BMDS). The capabilities developed and deployed as part of the integrated BMDS protect the United States from the potential emergence of an ICBM threat from Iran or North Korea. To maintain this advantageous position, the Administration is taking steps to improve the protection of the homeland from the potential ICBM threat posed by Iran and North Korea. These steps include the continued procurement of ground-based interceptors (GBIs), the deployment of additional sensors, and upgrades to the Command, Control, Battle Management, and Communications system. Improvements to the Ground-based Midcourse Defense (GMD) system, in particular, will better protect the United States against future ICBM threats, whether from Iran, North Korea, or other regional actors.

In the future, if projections regarding Iran or North Korea change significantly, then the United States should reassess its baseline program and consider implementing some elements of our hedge posture.

Mr. LAMBORN. This summer, when asked about the consequence of cuts to NNSA's modernization program, Secretary Gates said: "This modernization program was very carefully worked out between ourselves and the ... Department of Energy. And, frankly, where we came out on that also, I think, played a fairly significant role in the willingness of the Senate to ratify the New START agreement. So the risks are to our own program in terms of being able to extend the life of our weapon systems ... this modernization project is, in my view, both from a security and a political standpoint, really important." Do you agree with Secretary Gates that the modernization project is very important both from a national security standpoint and from a perspective of sustaining support for the New START Treaty? What are the consequences of not funding the "very carefully worked out" plan for NNSA modernization?

Dr. MILLER. I agree with Secretary Gates that NNSA's modernization is very important to U.S. national security. The nuclear security enterprise remains, today and for the foreseeable future, the foundation of the U.S. deterrence strategy and defense posture. The Administration is committed to making the investments nec-

Dr. FLEMING. One of the binding conditions (condition 9(B)) of the Senate's Resolution of Ratification for the New START Treaty says: "If appropriations are enacted that fail to meet the resource requirements set forth in the President's 10-year [Section 1251] plan ... the President shall submit to Congress, within 60 days of such enactment ... a report detailing—(1) how the President proposes to remedy the resource shortfall; (2) if additional resources are required, the proposed level of funding required and an identification of the stockpile work, campaign, facility, site, asset, program, operation, activity, construction, or project for which additional funds are required; (3) the impact of the resource shortfall on the safety, reliability, and performance of United States nuclear forces; and (4) whether and why, in the changed circumstances brought about by the resource shortfall, it remains in the national interest of the United States to remain a Party to the New START Treaty."

a. Administrator D'Agostino, General Kehler, and Dr. Miller: Which of you is responsible for this report? Has the President delegated his responsibility on this requirement from the Resolution of Ratification?

b. The current continuing resolution funds NNSA's modernization plans well below the FY12 levels laid out in the 1251 plan—essentially at a level 1.5% below FY11. Is the administration preparing a report for submission to Congress per this requirement? Please submit such a report, in writing, prior to the expiration of the current CR.

c. If the funding levels for Weapons Activities in the Energy and Water appropriations bills in the House and Senate are enacted, or if sequestration or a budget deal results in funding for Weapons Activities less than that laid out in the Section 1251 plan, will the administration submit a report per this binding condition?

Mr. D'AGOSTINO. The main responsibility for this report lies with the Department of Defense. Should there be a resource shortfall, NNSA would work closely with the DOD in drafting the President's report specified in Condition 9(B) of the Senate's Resolution of Advice and Consent to Ratification for the New START Treaty.

While we recognize that fiscal austerity will constrain spending on national security programs in the years ahead, our strategic and extended deterrence will continue to be the top priority. The President committed to modernizing our nuclear weapons and infrastructure after completion of the 2010 Nuclear Posture Review—including a commitment to pursue these programs and capabilities for as long as he is President. Even in this difficult budget climate, the President's budget for NNSA continues to consistently reflect those commitments.

The Department of Defense contributed significantly to the preparation of NNSA's budget requests for FY2011 and FY2012, and is prepared to continue support at least through FY2016. These contributions are reflective of the close linkage between NNSA's nuclear weapons programs and the specific needs of its partner, the Department of Defense. Without adequate funding for NNSA, however, the nuclear weapons life extension programs, nuclear infrastructure modernization, and the retention of the people on which we depend to maintain a safe, secure, and effective nuclear arsenal, may be at risk and will continue to be analyzed in consultation with the Department of Defense.

QUESTIONS SUBMITTED BY MR. SCOTT

Mr. SCOTT. How is deterring China different from deterring Russia?

a. How is providing extended deterrence in Europe different than doing so in East Asia?

b. During a recent Strategic Forces Subcommittee hearing on the nuclear weapons programs of Russia and the People's Republic of China, Dr. Mark Schneider stated: "We know a lot less about China overall than we know about the Russians in nuclear capability, if for no other reason that the Russians talk about it all the time, where the Chinese are fairly secretive. I think you can find deliberate leaks by the PLA in Hong Kong Press. I think they are using that as a mechanism of debating some issues that they can't openly debate in China. But I suspect we are going to see a very large increase in Chinese capability, including extensive MIRVing."

How do we hedge the uncertainty in our understanding of China's nuclear weapons program? How will this be reflected in the Administration's mini-NPB on nuclear weapons targeting? Why do you think China has a large underground tunnel complex for its second artillery?

Dr. MILLER. Fundamentally, deterrence requires that, in the calculations of any potential adversary, the perceived gains of attacking the United States or its allies and partners would be far outweighed by the unacceptable costs of the response. But in seeking to deter potential adversaries, there is no "one size fits all" approach. The requirements of deterrence vary by circumstance, including the capabilities of

the adversary, the nature of the issue in dispute, and the ability and willingness of the adversary to escalate—and to exercise restraint. Uncertainty is an enduring feature of the deterrence equation, though the United States makes a priority of trying to reduce such uncertainty with detailed assessments of the intentions and capabilities of potential adversaries. Uncertainty about the potential future nuclear weapons capabilities of other states is also an enduring theme of U.S. deterrence policy. Every President in the nuclear era has sought to have some capacity to respond to a significant erosion of the nuclear security environment. The United States hedges against such uncertainty by ensuring that it has the technical means to cope with geopolitical surprise, with a mix of short-term responses (such as the potential to upload existing weapons onto existing delivery systems) and long-term responses (the production and deployment of new capabilities). The requirements of this hedge are one of the many elements in review in the NPR Implementation Study.

China's large underground tunnel complex fits well with China's overall military strategy. It enables China to conceal capabilities, in a manner consistent with its general lack of transparency. And it helps to ensure that its leadership and any hidden capabilities survive attack.

Providing extended deterrence to Allies in NATO and in East Asia is similar in some ways and different in others. It is similar in a) an appropriate mix of nuclear and non-nuclear capabilities; b) a combination of capability and credibility to effectively deter potential adversaries and assure Allies; c) appropriate consultations between the United States and Allies; and d) adjustments over time to account for changes in the security environment.

Providing extended deterrence to Allies in NATO and in East Asia is different in several respects, including: a) different mutual expectations about the specific modalities of nuclear deployments, as reflected in differing historical practices; and b) different assessments of the specific requirements for deterring potential adversaries.

Mr. SCOTT. Some budget cutting proposals that are circulating have suggested significantly reducing the size of our intercontinental ballistic missile (ICBM) force to save money. For instance, eliminating one-third of the ICBM force by cutting one of the three wings.

a. Does the New START Treaty require us to close down an entire ICBM wing to meet its deployed strategic launcher limit? What about eliminating a squadron?

i. Would such a cut amount to a unilateral reduction in delivery vehicles?

ii. Is such a reduction being considered in the 90-day NPR Implementation Study?

b. Based on the most recent public data released as part of a New START Treaty data exchange, if we were to eliminate 150 ICBMs this would be more than enough to put us below the 700 deployed strategic launchers limit. Would we then retain all of our forces in the other legs of the triad, to remain at or near the New START limit?

c. Please describe when de-MIRVing of our ICBMs will begin to occur under the 2010 NPR. Please describe when DOD intends to have that process and completed, how much it will cost, and how the skill set required to upload in the event that is necessary will be maintained.

Dr. MILLER. The New START Treaty does not require the United States to reduce any specific element of its strategic forces. To date, no final decisions have been made with respect to future strategic nuclear force structure; such decisions will be informed by the Administration's ongoing NPR implementation study.

The elimination of 150 deployed ICBMs, if that were to be decided (and to respond to your specific conjecture) would allow the United States to retain all or virtually all of its current deployed strategic forces in the other legs of the Triad under the limits of the New START Treaty. Force structure decisions will be consistent with the goals of the Nuclear Posture Review (NPR), including maintaining strategic stability, providing assurance to our Allies and partners of the credibility of the U.S. nuclear umbrella and other security commitments, and maintaining a safe, secure, and effective nuclear deterrent. I expect a final decision regarding the specific force mix for New START Treaty implementation to be made following the conclusion of the NPR implementation study in the near term.

The "de-MIRVing" (reduction of Multiple Independent Reentry Vehicle capability) of our ICBM forces has already begun. In order to maximize safety and security, we have allowed the Air Force to begin de-MIRVing ICBMs in conjunction with its previously established maintenance plans. This minimizes disruption to our operational forces and is the most cost-effective method for carrying out the NPR guidance to de-MIRV the ICBM force.

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a. How is providing extended deterrence in Europe different than doing so in East Asia?

b. During a recent Strategic Forces Subcommittee hearing on the nuclear weapons programs of Russia and the People's Republic of China, Dr. Mark Schneider stated:

"We know a lot less about China overall than we know about the Russians in nuclear capability, if for no other reason that the Russians talk about it all the time, where the Chinese are fairly secretive. I think you can find deliberate leaks by the PLA in Hong Kong Press. I think they are using that as a mechanism of debating some issues that they can't openly debate in China. But I suspect we are going to see a very large increase in Chinese capability, including extensive MIRVing."

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General KEHLER. The primary difference in how extended deterrence is provided today is that in Europe we have forward deployed non-strategic nuclear capabilities and robust nuclear burden sharing commitments with our NATO allies. We do not have forward deployed non-strategic nuclear capabilities in East Asia.

In general we hedge against uncertainty, both geopolitical and technical, by retention of non-deployed warheads in the stockpile in order to provide the ability to increase warhead loading on our existing nuclear systems, and through our infrastructure's ability to diagnose and repair weapons that develop technical problems. Today, this hedge relies more heavily on the stockpile, but as our infrastructure is modernized it will assume a larger share of the required capability. The ongoing follow-on analysis to the NPR is examining our hedge requirements.

Since the early 1950s, the PLA has employed underground tunnels to protect and conceal its vital assets. These likely include both nuclear and conventional missile forces.

Mr. SCOTT. Some budget cutting proposals that are circulating have suggested significantly reducing the size of our intercontinental ballistic missile (ICBM) force to save money. For instance, eliminating one-third of the ICBM force by cutting one of the three wings.

a. Does the New START Treaty require us to close down an entire ICBM wing to meet its deployed strategic launcher limit? What about eliminating a squadron?

i. Would such a cut amount to a unilateral reduction in delivery vehicles?

ii. If we were to eliminate a third of our ICBM force, how would you like to see our future SSBN force structured (number of boats, number of tubes, etc.)? Are the size and makeup of the ICBM and SSBN forces linked? How?

iii. Would you support such a cut? Have you done any analysis that would support a cut of 150 ICBMs?

b. Based on the most recent public data released as part of a New START Treaty data exchange, if we were to eliminate 150 ICBMs this would be more than enough to put us below the 700 deployed strategic launchers limit. Would we then retain all of our forces in the other legs of the triad, to remain at or near the New START limit?

c. Please describe when de-MIRVing of our ICBMs will begin to occur under the 2010 NPR. Please describe when DOD intends to have that process completed, how much it will cost, and how the skill set required to upload in the event that is necessary will be maintained.

General KEHLER. A. No, New START provides considerable flexibility to manage the deployed force and meet strategic deterrent requirements in a cost effective and safe manner over the duration of the treaty.

i. The treaty provides the flexibility to manage the deployed force within central limits, not to exceed 700 deployed strategic delivery vehicles (SDVs). My principle concern is ensuring the strategy objectives are met and deterrence and stability are maintained while ensuring we are as cost efficient as possible.

ii. Any decision to reduce Minuteman and subsequently change SSBN and bomber force structures must be based on strategy. The size and makeup of the SSBN and ICBM forces are complementary. Sufficient ballistic missile capabilities must be retained to address strategy requirements. Therefore, potential adjustments in Minuteman would result in a reassessment of the entire force structure.

iii. Any adjustment to Minuteman must be strategy based. USSTRATCOM is participating in the ongoing National Security Staff (NSS) led interagency activity and is providing analysis and military advice to OSD and the Joint Staff. Any detailed discussion of that analysis and potential implications to our current force structure is premature.

B. Not necessarily. I am concerned about meeting policy and strategy objectives and maintaining deterrence and stability. New START provides the U.S. consider-

able flexibility in determining the composition and structure of its strategic offensive arms. New START provides the option of retaining force structure, if required, and deployed strategic launchers should be viewed as a "ceiling" not a "floor," so we can meet our operational needs with flexibility.

C. We are working with the Air Force to develop plans to begin de-MIRVing Minuteman in FY12. There are many factors that impact completion date including integration with other maintenance activities and weather. In the near-term, skills to accomplish re-MIRVing is not an issue. I have asked the Air Force to develop long-term re-MIRVing plans to include cost and skill set retention.

Mr. SCOTT. Under Secretary Tauscher, we hear the Russians are placing certain conditions on starting any new arms control talks—in other words, Russia is saying these conditions must be met before any negotiations can begin on another arms control agreement. For instance, we have heard that Russia is demanding that U.S. nuclear weapons be removed from Europe, that we destroy the infrastructure in Europe that supports those weapons so that they cannot be easily redeployed, and that NATO allies cease training for the nuclear mission. Is this correct? What other conditions is Russia saying must be met by the U.S. before negotiations can begin? What conditions is the United States saying must be met by Russia before negotiations can begin?

Secretary TAUSCHER. Some Russian officials have suggested that several issues should be considered in future discussions, but whether those suggestions amount to preconditions remains unclear. In regards to tactical nuclear weapons, Russian Foreign Minister Lavrov on March 1, 2011, stated at the UN Conference on Disarmament that the "first step" towards reductions in these weapons should be the "withdrawal of tactical nuclear weapons to the territory of the State to which they belong as well as removal of the infrastructure for their deployment abroad."

The United States rejects preconditions for discussions with Russia to reduce nuclear weapons. The President has certified to the Senate and the United States has made clear to the Russians that we seek to initiate negotiations with the Russian Federation on an agreement to address the disparity between the nonstrategic nuclear weapons stockpiles of the Russian Federation and the United States and to secure and reduce these weapons in a verifiable manner and that such negotiations shall not include defensive missile systems. Indeed, the United States is committed to continuing a step-by-step process, as outlined by President Obama in Prague in 2009, to reduce the overall number of nuclear weapons, including the pursuit of a future agreement with Russia for broad reductions in all categories of nuclear weapons: strategic, nonstrategic, deployed and nondeployed.

As a first step, we want to have a broad policy discussion with Russia on stability, security, and confidence-building, which will help lay the groundwork for eventual further nuclear arms reductions.



QUESTIONS SUBMITTED BY MEMBERS POST HEARING

NOVEMBER 2, 2011
